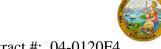
### **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 99.28

# WELDING INSPECTION REPORT

Resident Engineer: Casey, William **Report No:** WIR-029432 Address: 333 Burma Road **Date Inspected:** 16-Apr-2013

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1100 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: American Bridge Manufacture **Location:** Reedsport, Oregon

**CWI Name:** Mike Inman **CWI Present:** Yes No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

**Bridge No:** 34-0006 **Component:** Supplemental Cable Band Collar

### **Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) representative was present at American Bridge Manufacture for observations related to welding, fabrication and Inspection performed for the Supplemental Cable Band Collar scheduled for this project. While onsite the QA Inspector observed the following.

At the time of arrival, the QA Inspector met with ABM Quality Control (QC) Inspector and discussed the welding, Non-Destructive testing (NDT) and other project related operations scheduled for this project for this date.

NOTE: The QA Inspector and ABM Quality Control Manager (QCM) Dave Speakman discussed the material verification requested to be perform at Farwest Steel Corporation in Eugene, Oregon on this date for this project. The QA Inspector notified QCM that the QA Inspector will depart this facility during the shift to visit Farwest.

### Supplemental Cable Band Collar Welding - CCO # 274

The QA Inspector periodically observed American Bridge Manufacture (MCM) welding personnel Cody Greer performing base material preheating, preparation and welding operations. The welding operation was being performed by using the Flux Cored Arc Welding Gas Shielded (FCAW-G) process in the horizontal position and it was being performed to make Complete Joint Penetration (CJP) and Partial Joint Penetration (PJP) welds. The welding operation was being performed between assembly members on the Supplemental Cable Band Collar identified as number 8. (A total of 6 plates were attached on bottom and 6 plates on top sides of assembly).

The QA Inspector verified the electrical welding parameters and they appeared to be in general compliance with the referenced Welding Procedure Specification (WPS) number ABM-SAS-25 and ABM-SAS-08. The QA

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

Inspector observed QC Inspector monitoring the welding operation at this location. The welding operation between assembly members was in progress at the time that the QA Inspector departed the job site.

# Supplemental Cable Band Collar Welding - CCO # 274

The QA Inspector periodically observed ABM welding personnel Brian Moore performing base material preparation and welding operations. The welding operation was being performed by using the FCAW-G process in the horizontal position and it was being performed to make CJP and PJP welds. The welding operation was being performed between assembly members on the Supplemental Cable Band Collar identified as number 7. (A total of 6 plates were attached on bottom and 6 plates on top sides of assembly).

The QA Inspector verified the electrical welding parameters and they appeared to be in general compliance with the referenced WPS number ABM-SAS-25 and ABM-SAS-08. The QA Inspector observed QC Inspector monitoring the welding operation at this location. The welding operation between assembly members was in progress at the time that the QA Inspector departed the job site.

### Supplemental Cable Band Collar Welding - CCO # 274

The QA Inspector periodically observed ABM welding personnel Ryan Whiteman performing base material preparation and welding operations. The welding operation was being performed by using the FCAW-G process in the horizontal position and it was being performed to make fillet welds. The welding operation was being performed between assembly members on the Supplemental Cable Band Collar identified as number 2. (A total of 4 plates were attached on top and 4 plates on bottom sides of assembly. Additionally two plates attached to top and two plates attached on bottom of assembly).

The QA Inspector verified the electrical welding parameters and they appeared to be in general compliance with the referenced WPS number ABM-SAS-07. The QA Inspector observed QC Inspector monitoring the welding operation at this location. The welding operation between assembly members was in progress at the time that the QA Inspector departed the job site.

#### Supplemental Cable Band Collar Fit-up - CCO # 274

The QA Inspector periodically observed ABM personnel Mike Hebert performing base material preparation, fit-up and tack welding operations. The fit-up operation was being performed to attach assembly plate members to continue making the Supplemental Cable Band Collar identified as number 4. (A total of four plates will be attached to top and four on bottom of the assembly.

During the fit-up in progress and after the members were aligned, the QA Inspector observed ABM welding personnel performing tack welding operations using the FCAW-G process in the horizontal position. The QA Inspector verified the electrical welding parameters that appeared to be general compliance with the referenced WPS number ABM-SAS-07.

The QA Inspector observed QC Inspector monitoring the fit-up and tack welding operations at this location. The total fit-up and tack welding operations were completed between assembly members during the QA Inspector's shift.

Supplemental Cable Band CCO # 274 - Ultrasonic Testing Verification

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)

The QA Inspector performed random Ultrasonic Testing (UT) verification on Complete Joint Penetration (CJP) "T" joint welds made between assembly plate members attached on the Supplemental Cable Band Collar identified as number 6 and 16. (Note: ABM completed the UT inspection on the completed welds during the last shift and did not report any welding rejects). The QA Inspector did not observe any rejectable welding discontinuities during the verification. Please note that the QA Inspector followed the rejection and acceptance criteria table number 6.3 from the AWS D1.5 code. Please see the QA Inspector Ultrasonic Testing Report (TL-6027) generated on this date for additional information. The QA Inspector notified QA Task Leader Michael Foerder and Structural Materials Representative (SMR) Yiannis Kourakis (in behalf of Gary Thomas) of the UT verification and the rejection criteria table used during the verification.

### **Summary of Conversations:**

As noted on the body of the report above. Other Basic communication was performed between the QA Inspector and the Quality Control Inspector during observations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Gary Thomas (916) 764-6027, who represents the Office of Structural Materials for your project.

Inspected By:	Medina,Ricardo	Quality Assurance Inspector
Reviewed By:	Foerder, Mike	QA Reviewer